

**A Purified 20 kDa Presenilin 2 C-terminal Fragment and
Methods of Screening for Compounds that Inhibit Proteolysis
of Presenilin 2**

Abstract

5 The present invention relates, in general, to presenilin 2 proteolytic fragments. In particular, the present invention relates to a purified 20 kDa presenilin 2 C-terminal fragment (PS2-CTF); purified nucleic acid molecules coding for the 20 kDa PS2-CTF protein; cells containing the nucleic acid molecules; non-human organisms containing the nucleic acid molecule; antibodies having specific binding affinity to the 20 kDa PS2-CTF; hybridomas containing the antibodies; methods of detecting 20 kDa PS2-CTF in a sample; diagnostic kits; methods for screening compounds that inhibit proteolytic processing of presenilin 2 in a cell, isolated compounds that inhibit proteolytic processing of presenilin 2 in a cell, and a method of inhibiting apoptotic cell death by preventing proteolytic cleavage of presenilin 2 at a cleavage site which generates a 20 kDa C-terminal fragment.

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